VYALOV, O.S., prof.; TKACHUK, L.G., prof.

Lime incrustations from the Antarctic. Priroda 47 no.6:113-114
Je '58. (MIRA 11:7)

1. Institut geologii poleznykh i skopayemykh AN USSR, L'vov.
(Antarctic regions--Calcite)

VYALOV, O.S.

15-57-1-354

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 55 (USSR)

AUTHOR: Vyalov, O. S.

TITLE: Short Survey of the History and Conditions of Formation of the Sediments in the Western Regions of the Ukrainian SSR (Kratkiy obzor istorii i usloviy obrazovaniya osadkov v zapadnykh oblastyakh UkrSSR)

PERIODICAL: Tr. Soveshchaniya po tektonike al'piysk. Geosinklinal'-noy obl. yuga SSSR, Baku, AN AzerbSSR, 1956, pp 233-246

ABSTRACT: Bibliographic entry

Card 1/1

VYALOV, O.S.

Brief description of the Davis Sea coasts and Depot (Farr) Bay and Mirnyy Station regions. Nauk. zap. L'viv. un. 40:268-274 '57. (MIRA 11:6)

(Antarctic regions--Physical geography)

VYALOV, O.S.; TKACHUK, L.G. [Tkachuk, L.H.]

Limestone scales from the vicinity of Mirnyy in the Antarctic. Geol. zhur. 18 no. 2:80-82 '58. (MIRA 11:7)

(Antarctic regions--Limestone)

VYALOV, O.S.; SOBOLEV, V.S.

Gaussberg in the Antarctic. Izv. vys. ucheb. zav.; geol. i razv. no.2:3-17 F '58. (MIRA 11:6)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko, kafedry geologii i petrografii.

(Gaussberg--Geology)

VYALOV, O.S.; PISHVANOVA, L.S.; PETRASHKEVICH, M.I.; GRISHKEVICH, G.N.

Miocene stratigraphic scale of Transcarpathia. Biul.MOIP.Otd. geol. 37 no.5:69-79 S-O '62. (MIRA 15:12)
(Transcarpathia--Geology,Stratigraphic)

VYALOV, O.S., akademik; DABAGYAN, N.V. [Dabahian, N.V.]; VITRIK, S.P. [Vitryk, S.P.]; SHAKIN, V.A.

"Svalyava 1" a deep borehole in the Pieniny (Cliff) zone of the Carpathians. Dop. AN URSR no.5:631-635 '63. (MIRA 17:9)

1. Institut geologii goryuchikh iskopayemykh AN UkrSSR.
2. AN UkrSSR (for Vyalov).

VYALOV, S. S.

PA 171T67

USSR/Geophysics - Soil Mechanics Nov/Dec 50
Permafrost

"Determination of the Heat Field Around Underground Constructions," S. S. Vyalov, Inst of Permafrost Studies imeni V. A. Obruchev, Acad Sci USSR

"Iz Ak Nauk SSSR, Ser Geograf i Geofiz" Vol XIV, No 6, pp 553-562

Determines nonstationary heat field around underground constructions at such depth that temperature of soil surface has no effect. Problem arises particularly in heat-engineering

[redacted] 171T67

USSR/Geophysics - Soil Mechanics Nov/Dec 50
(Contd)

calculations for subways, tunnels, underground gasification, etc. Solves by analytical method and electrical modeling. Submitted by Acad V. A. Obruchev 27 Jun 50.

[redacted] 171T67

184T40

USSR/Electricity - Computers
Analogues
Jan 51

"Solution of Some Thermotechnical Problems by Electric Analogue ('Modeling') Methods," S. S. Vyalov, L. G. Kogan, Inst Permafrost Studies imeni V. A. Obruchev, Acad Sci USSR, and Inst of Precision Mech and Computing Tech, Acad Sci USSR

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 1, pp 39-53

Applied elec analogue methods developed by L. I. Gutenmakher to study of some thermotech problems, particularly problems of heat transfer in soils. Used elec integrators EI-11, EI-12, EI-22, and EI-31. Advantages of method are speed and

184T40

USSR/Electricity - Computers (Contd) Jan 51

simplicity. Solved 50 problems of heat cond in 20 days. Submitted 8 Jun 50.

184T40

USSR/Engineering - Construction, Grounds Jun 51

"Equilibrium Limit of Soft Grounds Underlaid by a Rigid Bed," S. S. Vyalov, Inst of Permafrost Studies imeni V. A. Obruchev, Acad Sci USSR

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 6, pp 813-828

Investigates plane problem concerning limit equil of soft grounds, i.e., plastic clays, silts, water-satd loose soils, underlaid by rigid base and carrying uniformly distributed load of structure. Problem is solved by methods of generalized theory developed by V. V. Sokolovskiy for limit equil of

205T7

USSR/Engineering - Construction, Grounds Jun 51
(Contd)

loose materials ("Statics of Loose Medium," 1942 and "Theory of Plasticity," 1946, both published by Acad Sci USSR). Rigid bed considerably effects plastically stressed condition of underlaid ground, decreasing its carrying capacity, but has favorable effect on value of settlements. Submitted by Acad L. S. Leybenzon (deceased).

205T7

VYALOV, S.S.; TSYTOVICH, N.A.

Binding properties of frozen ground. Dokl.AN SSSR 104 no.4:527-529 O '55.
(MIRA 9:2)

1.Chlen-korrespondent AN SSSR (for TSytovich). 2.Institut merzlotevedeniya imeni V.A.Obrucheva Akademii nauk SSSR.
(Frozen ground)

VYALOV, S.S.

[illegible]

Creep and long-term resistance of frozen ground. Dokl. AN SSSR 104 no.6:850-853 O '55.
(MLRA 9:3)

1. Institut merzlotovedeniya imeni V.A. Obrucheva Akademii nauk SSSR. Predstavleno akademikom V.A. Obruchevym.
(Frozen ground)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, 15-57-3-3788D
p 187 (USSR)

AUTHOR: Vyalov, S. S.

TITLE: The Rheological Properties and Bearing Capacity of Frozen Ground (Reologisheskiye svoystva i nesushchaya sposobnost' merzlykh gruntov)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Technical Sciences, presented to the In-t merzlotoved, AN SSSR (Permafrost Institute of the AS USSR), Moscow, 1956

ASSOCIATION: In-t merzlotoved. AN SSSR (Permafrost Institute of the AS USSR), Moscow

Card 1/1

VYALOV, S.S.

Relation between stress and deformation of frozen grounds with Allowance for the time factor. Dokl. AN SSSR 108 no.6:1049-1052 Je '56.
(MIRA 9:10)

1. Institut merzlotovedeniya imeni V.A. Obrucheva Akademii nauk SSSR. Predstavleno akademikom V.A. Obruchevym [deceased].
(Frozen grounds)

VYALOV, S.S.; TSYTOVICH, N.A.

Spherical-die impression technique for estimating the supporting capacity of bound soils. Dokl. AN SSSR 111 no.6:1193-1196 D '56. (MIRA 10:3)

1. Chlen-korrespondent AN SSSR (for TSytovidh). 2.Institut merzlotovedeniya im. V.A. Obrucheva Akademii nauk SSSR.
(Soil mechnics)

VYALOV, S. S., Cand. Tech. Sci., Senior Research Worker, Frozen Ground Research Institute of the USSR AS, Moscow, and SKIBITSKIY, A. M., Civil Engineer, Research Division, Hydroproject, Moscow

"Rheological Processes in Frozen Soils and Dense Clays," a paper submitted at the International Conference of the International Society of Soil Mechanics and Foundation Engineering, London, 12-24 Aug 57.
[references 7 Soviet papers]

SOV/124-58-10-11595

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 129 (USSR)

AUTHOR: Vyalov, S. S.

TITLE: Application of the Electric Integrating Computer for Determining Stresses in Soils (Primeneniye elektrointegratora dlya opredeleniya napryazheniy v gruntakh)

PERIODICAL: Materialy po labor. issled. merzlykh gruntov. Nr 3. Moscow, AN SSSR, 1957, pp 312-321

ABSTRACT: Basic procedures of the application of the electric integrating computer for determining stresses in a linearly-deforming semi-plane loaded along its edge by a distributed arbitrary load are described.

A. S. Stroganov

Card 1/1

VYALOV, S. S.

TSYTOVICH, N.A.; NERSESOVA, Z.A.; BOZHENOVA, A.P.; TATYUNOV, I.A.; DOSTOVALOV, B.N.; SHUMSKIY, P.A.; BAKULIN, F.G.; SAVEL'YEV, B.A.; ZHUKOV, V.F.; MARTYNOV, G.A.; VYALOV, S.S.; SHUSHERINA, Ye.P.

Physical phenomena and processes in freezing, frozen, and thawing soils; general comments. Mat. po lab. issl. merzl. grunt. no.3:7-114 '57. (MIRA 10:11)

(Frozen ground)

VYALOV, S.S.

VYALOV, S.S.

Rheological processes in frozen soils and the condition of their stress limit. Mat. po lab. issl. merzl. grunt. no.3:234-254 '57.
(Soil mechanics) (Frozen ground) (MIRA 10:11)

Vyalov, S.S.

VYALOV, S.S.

[redacted]

Using an electric integrator for determining soil stresses. Mat. po lab. issl. merzl. grunt. no.3:312-321 '57. (MIRA 10:11)
(Integrators) (Soil mechanics)

Vyalov, S.S.

AUTHOR: Vyalov, S. S., Doctor of Technical Sciences. 30-9-7/48

TITLE: The Work of Scientists in the Antarctica. - The First Research Data According to the Program of the International Geophysical Year (Rabota uchenykh v Antarktike. - Pervyye issledovaniya po programme Mezhdunarodnogo Geofizicheskogo goda).

PERIODICAL: Vestnik AN SSSR, 1957, Vol. 27, Nr 9, pp. 41 - 45 (USSR).

ABSTRACT: With the beginning of the International Geophysical Year the culminating point of winter was reached in the Antarctic. The main base of Mirnyy with the observatory-cabins has for a long time been buried in snow, above it a storm sweeps the country which often reaches a speed of 40 sec°m. The temperature in Mirnyy varies between -14,2 and -15,5° (May - July); in the interior of the antarctic continent (base of Vostok I) the temperature dropped to -52,7°. An expedition to the base of Pionerskaya and a 3 months lasting advance with sledges and special motor traction machines to the 640the and 900the kilometer-point was carried out with success. Before the beginning of winter the last ships weighed anchor on the antarctic coast. The geophysical observations are continued without interruption. a systematic observation of the atmosphere is made by means of airplane;

Card 1/2

The Work of Scientists in the Antarctica. 30-9-7/48
The First Research Data According to the Program of the International Geophysical Year.

reconnaissance flights in the interior of the continent are also carried out. Interesting first data were brought by the sledge-expedition: It was found that the layer of ice between Mirnyy and the base of Pionerskaya reaches a thickness of 100-200 m, on the coast, however, it drops to 3-3,5 m. The mother rock under the immense ice-crust in some places goes down to several hundred meters below the sea-level. The radio communication between the bases works well.

AVAILABLE. Library of Congress.

Card 2/2

VYALOV, S. S'., starshiy nauchnyy sotrudnik.

Setting course for the Antarctic. Znan. sila 32 no.1:35 Ja '57. (MIRA 10:4)

1. Antarkticheskaya ekspeditsiya. Spetsial'nyy korrespondent zhurnala "Znaniye - sila".

(Antarctic region)

VYALOV, S.S.

AUTHOR: Vyalov, S.S., Doctor of Technical Sciences 4-2-1/18

TITLE: **Reporting from** the Sixth Continent (Reportazh s shestogo kontinenta)

PERIODICAL: Znaniye-Sila, 1958, # 2, pp 1-3 (USSR)

ABSTRACT: This is a report of a trip to the Antarctic, which started in January 1957. The author traveled by sea (the "Kooperatsiya" ice-breaker) and air (2-engined LI-2). He gives a short travelogue of the trip.

There are four sketches.

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Card 1/1

Vyalov, S.S.

30-2-5/49

AUTHOR: Vyalov, S. S. , Doctor of Technical Sciences

TITLE: **The Third Team of Antarctic Explorers** (Tret'ya smena issledovateley Antarktiki)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 2, pp 33-38 (USSR)

ABSTRACT: With the beginning of antarctic spring particularly intensive work is carried out. The geologists, hydrologists and glaciologists carry out their observations from aeroplanes. The field parties march out on new routes. At present a seismic group of C. K. Kondrat'yev is working 50 km South of Mirnoye, in order to investigate the thickness of the glacier ice. The meteorologists carry out their observations according to the precise program of the International Geophysical Year. With the rise of the sun the actinometric observations are intensified. According to this observation V. I. Shlyakhov has carried out a calculation of the possibly lowest air temperatures on the glacier surface, which amount to -80° ± 2° for the central region of the Antarctic and to -78° ± 2° for the stations Vostok and Yuzhnyy polyus. The lowest temperature

Card 1/3

30-2-5/49

observed this year amounted to -74,5° in Yuzhnyy polyus on September 14. The geophysicists carry out regular observations of the earth's magnetism, of the earth currents, of cosmic rays, of the polar light and of the propagation of radio-waves. In the course of two years no earthquake with the epicenter in the Antarctic was observed by the earthquake observatories Mirnoye and Oazis. V. A. Chernigov has carried out snow- and ice-investigations by means of supersound equipment. P. A. Shumskiy and the author of the present paper have in the laboratory investigated crystal-physical processes. V. N. Bogoslovskiy stated that in the interior mass of the glacier the temperature does not rise, but decrease. N. F. Grigor'yev has investigated the frost-processes in ice-free places. The Soviet scientists keep up a regular connection with the foreign Antarctic expeditions. Under the direction of A. F. Treshnikov continental "very long lasting" expeditions were undertaken, in which 27 men took part. In the station Komsomol'skaya V. S. Polevin with a group has started his work, and in the temporary station Vostok I 8 men have hibernated with V. G. Aver'janov. Just now in the Ant-

The Third Team of Antarctic Explorers 30-2-5/49

arctic midsummer is prevailing, in the case of which in Mirnoye the temperature amounts to about 0° - +5°C; in Komsomol'skaya it remains by about 20-30° below zero. On November 18, 179 men under the direction of Ye. I. Tolstikov and V. G. Kort arrived by ships "Ob'" and "Kooperatsiya" as third relief. The ships brought foodstuffs, outfit and new special means of transportation, among others also 3 aeroplanes to Mirnyy. By means of an aeroplance IL-12 investigations in the antarctic region were carried out. On December 26, a group under the direction of A. F. Nikolayev has set out to the interior of the continent. At a distance of 800 km from Komsomol'skaya the station Sovetskaya is to be organized, where 6 men with V. K. Babarykin are to hibernate.

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Card 3/3

1. Meteorology-Antarctic regions-USSR 2. Geology-Antarctic regions-USSR 3. Hydrology-Antarctic regions-USSR 4. Ice-Antarctic regions 5. Geophysics-USSR

SOV-4-58-9-17/34

AUTHOR: Vyalov, ~~S.,~~ Doctor of Technical Sciences, Special Correspondent of "Znaniy-sila"

TITLE: Where it Is Coldest of All (Tam, gde vsego kholodneye)

PERIODICAL: Znaniye-sila, 1958, Nr 9, pp 20-22 (USSR)

ABSTRACT: A general description of observations made by Soviet antarctic stations (Mirnyy, Pionerskaya, Komsomol'skaya, Vostok-1) such as precipitations, snow properties, temperature etc. The following members of the Soviet antarctic expedition are mentioned: P.A. Shumskiy and V.M. Kotlyakov. There are 10 photographs, 2 graphs, and 4 drawings.

1. High pressure research--USSR

Card 1/1

VYALOV, S.S.; YEGOROV, N.I.

Experimental determination of soil-heaving forces. Trudy Inst. merzl. AN SSSR 14:40-55 '58. (MIRA 11:8)

(Frozen ground)
(Soil mechanics)

VYALOV, Sergey Stepanovich; TSYTOVICH, N.A., otv.red.; SHLEPOV, V.K., red.izd-va; BRUZGUL', V.V., tekhn.red.

[Rheological properties and the bearing capacity of frozen ground] Reologicheskie svoistva i nesushchaia sposobnost' merzlykh gruntov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 187 p. (MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for TSytovich).
(Frozen ground) (Foundations)

Vyalov, S.S.

3(5,7) PHASE I BOOK EXPLOITATION SOV/2822

Mezhduvedomstvennoye soveshchaniye po merzlotovedeniyu. 7th, Moscow, 1956

Materialy po inzhenernomu merzlotovedeniyu (Materials on Engineering Aspects of Permafrost; the 7th Interdepartmental Conference on Studies of Permafrost) Moscow, Izd-vo AN SSSR, 1959. 199 p. Errata slip inserted. 1,300 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye geologo-geograficheskikh nauk. Institut merzlotovedeniya.

Eds.: I. Ya. Baranov, N. A. Tsytovich, and A. M. Chekotillo; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: Ye. V. Makuni.

PURPOSE: This book is intended primarily for construction engineers and geologists interested in permafrost problems.

COVERAGE: This collection of articles contains reports originally discussed at the 7th Interdepartmental Conference on Permafrost held in Moscow in March, 1956. Materials of this conference were published in three issues: general permafrost studies, engineering aspects of permafrost [present work], and ground physics and mechanics. Individual articles of this work discuss basic problems of planning, building, and operating various buildings and structures in permafrost regions. Some of the information reported, particularly on hydraulic engineering construction, is new and appears for the first time in the literature on permafrost. Articles are accompanied by references.

Materials on Engineering Aspects (Cont.) SOV/2822

Trofimov, B. V. New Methods in Designing and Building Populated Areas With an Improved Microclimate 152

Pchelkin, G. A. Drainage Layout in Noril'sk 162

Bashevalikov, V. Ye. Grounding Electrical Engineering Installations Under Permafrost Conditions 172

Shetsenko, A. V. Specific Features of a Large-Scale Hydraulic Engineering Construction in Regions of Perennial and Deep Seasonal Permafrost in the Eastern USSR 177

Bakulov, E. A. Some Practical Problems in Designing Structures for Transportation Purposes in the Arctic Region 184

Gorshakov, I. N. Possible Methods of Controlling the Thermal Interaction of Grounds and Structures During the Development of the Tundra Regions of the Transpolar Area (Theses for the report made at the 7th Interdepartmental Conference of Permafrost Specialists) 197

Materials on Engineering Aspects (Cont.) SOV/2822

ANNOTATION:

Vyalov, S. S. Loading Capacity of Piles Driven Into Permanently Frozen Grounds 199

Gal'tsman, V. G. Thawing Permafrost Rocks on Dal'stroy's Dredging Polygons 200

Maksimov, G. N. Methods of Restoring Deformed Buildings and Reinforcing the Ground Under Them 201

Zhukov, V. F. Ensuring the Stability of Constructions by Thawing the Permanently Frozen Rocks of Foundation Beds in the Preconstruction Period 201

AVAILABLE: Library of Congress

MM/fal
1-5-59

Card 6/6

4

Vyalov, S.S.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

35. N. M. Borodachev (Kuibyshev): On the solution of the dynamic contact problem for a half-space under conditions of axial symmetry.
36. J. Brilla (Bratislava). Anisotropic plates with discontinuous supports.
37. B. M. Broude (Moscow): On the essential non-linearity of certain problems on column stability.
38. [illegible] (Kiev), [illegible] (Moscow): On the determination of safety factors under alternating random loads.
39. A. V. Burlakov (Khar'kov): An experimental investigation of creep of turbine diaphragm models.
40. E. V. Burmistrov (Saratov): On the stability of constructionally anisotropic circular ring plates.
41. St. Balan, V. Petcu, A. Beseu (Bucharest): The field of application of chronoplasticity.
42. D. V. Vainberg (Kiev): The state of stress of lamellar systems of regular configuration.
43. V. V. [illegible] (Moscow): Thixotropic properties of lubricants as basis of their rheological characteristics.
44. G. A. Van-Fo-Fi, G. N. Savin (Kiev): Application of Mathieu functions to the investigation of shells.
45. P. M. Varvak (Kiev): Determination of stresses and deformations in massive bodies.
46. [illegible] (Tbilisi): The flow of bitumens and filled bitumens in pipes.
47. I. N. Vekua, N. I. Muskhelishvili (Tbilisi): Applications of analytic functions in the theory of elasticity.
48. L. Ya. Viner (Tbilisi), V. V. Pinadzhyan (Yerevan): Experimental investigation of the behavior of eccentrically compressed short columns for long loading times.
49. G. V. Vinogradov (Moscow), A. A. [illegible] (Kazan), V. P. Pavlov (Moscow): Investigation of soft plastic bodies under combined states of stress.
50. G. V. Vinogradov, V. P. Pavlov (Moscow): Basic peculiarities of the mechanical properties of plastic lubricants.
51. A. I. Vinokur (Leningrad): Fundamentals of the linear theory of visco-elastic impact.
52. L. I. Vinokurov (Khar'kov): The solution of dynamic contact problems for foundations using a simplified model.
53. B. F. Vlasov (Moscow): On the equilibrium equations of thick elastic plates.
54. K. F. Voitkovskii (Yakutsk): The creep of ice and frozen soils under combined stresses.
55. M. P. Volarovich, G. Ya. Vorob'yev, E. F. Kovalevskii, G. I. [illegible] (Moscow): Studies of viscoelastic properties of porous bodies (e.g. peat) by the ultrasonic pulse method.
56. M. P. Volarovich (Moscow), A. M. [illegible] (Minsk): The plane flow of a visco-plastic medium between two planes forming an acute angle.
57. M. P. Volarovich, N. I. Gutkin (Moscow): Kinematics and dynamics of the flow of visco-plastic dispersed media past bodies of different shapes.
58. A. S. Vol'mir (Moscow): On the analysis of a short closed cylindrical shell.
59. S. D. Volkov, E. A. Klinskikh (Sverdlovsk): On the distribution of elastic constants in quasi-isotropic polycrystalline media.
60. I. I. Vorovich (Rostov-on-Don): A statistical method in the stability theory of shells.
61. I. I. Vorovich (Rostov-on-Don), A. S. Kosmodamianskii (Saratov): On stress concentration in a plane with an infinite number of holes.
62. S. P. [illegible] (Leningrad): Foundations of the general engineering theory of elastic beams.
63. S. S. Vialov (Moscow): The laws of deformation of ice.
64. S. S. Vialov (Moscow): The law of motion of ice crusts and the theory of visco-plastic flow based on research in the Antarctic.
65. N. B. Galileev (Leningrad): A method of obtaining polynomial stress and displacement functions.
66. K. Z. Galimov (Kazan): A contribution to the theory of the finite deformations of thin shells.
67. M. P. Galin (Moscow): The propagation of elastic-plastic bending and shear waves in the axisymmetrical deformations of shells.

VYALOV, S. S.

"On the Dynamics of the Antarctica Ice-Gap"

report to be submitted for the Intl. Geographical Union, 10th General Assembly and 19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

VOTYAKOV, Innokentiy Nikolayevich; VYALOV, S.S., doktor tekhn. nauk, otv. red. NIKOLAYEVA, I.N., red. Izd-va; SUSHKOVA, L.A., tekhn. red.

[Physicochemical properties of permafrost grounds of Central Yakutia] Fiziko-mekhanicheskie svoistva mnogoletnemerzlykh gruntov TSentral'noi IAkutii. Moskva, Izd-vo Akad.nauk SSSR, 1961. 58 p. (MIRA 14:6)
(Yakutia—Frozen ground) (Soil mechanics)

S/169/62/000/008/060/090
E202/E192

AUTHOR: Vyalov, S.S.

TITLE: The dynamics of the glacial cover of Antarctica

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 72, abstract 8 V 340. (In the collection: "XIX Mezhdunar. geogr. kongress v Stokgol'me, 1960" ('Materials of the 19th International Geographic Congress in Stockholm, 1960'), M., AN SSSR, 1961, 123-132).

TEXT: Using his theory of nonlinear viscoplastic flow, the author solves the general problem relating the accumulation and oblation of the solid precipitates and the temperature conditions of the glacial cover on the one hand, and the topography of its surface and the distribution of stresses and rates of movement on the other. By simultaneous solution of three equations - physical (rheological), dynamical equilibrium and mass balance - the following equations were obtained: 1) the rate of ice flow on the surface of the cap and in the mean of the cross-section; 2) equation connecting the topography of the cap and the amount

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Card 1/2

The dynamics of the glacial cover ... S/169/62/000/008/060/090
E202/E192

of accumulation. In this case the topography of Antarctica where the accumulation increases towards the edges is compared with the topography of Greenland where the accumulation increases towards the centre, in view of which the profile of the latter is steeper. The real topography of the Antarctic cap is well described by the elliptic equations in which $n = m = 2$. 3) the equations of stresses within the cap, along the bed. 4) equations of the flow velocity distribution with the height and length of the cap and its contour, taking into consideration the effect of the ice temperature. The theoretical calculations are compared with the observational data collected in the eastern Antarctica along the profile cross-section Mirnyy - Pionerskaya - Vostok-1 - Komsomol'skaya - Vostok. The calculated values coincide well with the observed ones.
4 references.

[Abstractor's note: Complete translation.]

Card 2/2

VYALOV, S.S.; PEKARSKAYA, N.K.; SHUSHERINA, Ye.P.

Method of testing the compressive and shear strengths of frozen ground, with consideration of creep. Merzl.issl. no.2:165-188 '61. (MIRA 16:5)

(Frozen ground--Testing)

S/124/62/000/001/043/046
D237/D304

AUTHOR: Vyalov, S. S.

TITLE: Viscous-plastic flow of the ice cover and the mechanism deformation of ice

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1962, 32, abstract 1V253 (V sb. Issled. po fiz. i mekhan. merzlykh gruntov. 4. M., AN SSSR, 1961, 137-155)

TEXT: The results are given of investigating ice under various loads in the Mirna village in the laboratory set-up within the snow layer and of the physical crystallography investigations conducted concurrently. Equations are obtained describing the process of compression of snow and ice and the mechanism of compression in the direction of increasing depth. In the top part, a fundamental density change occurs, while at a greater depth the density of the ice is nearly constant. The process of slipping

Card 1/3

S/124/62/000/001/043/046
D237/D304

Viscous-plastic flow...

of the ice depends on the orientation of its crystals relative to the direction of motion. Viscous motion occurs during the displacement along the base planes, and this motion has the highest velocity. During displacement of the ice with a random structure, its deformations accumulate discontinuously and consist of the displacement deformation of oriented crystals and deformations caused by disintegration of non-oriented crystals. The ice has a critical stress value, above which a small increase in the stress results in a large increase of the deformation velocity, which is characteristic for the avalanche of the glacier. The surface profile of the ice cover with the flow of ice under the stresses below the critical is obtained by basing the equation on the theory of non-linear-viscoso-plastic flow. The surface profile of the glacier where the mode of motion depends on solid deposits, temperature of the ice, and slope of the bed appears in many cases to be elliptical. A comparison is given of the profiles of the Antarctic glacier and Greenland glacier, and the equation of the distribution of flow velocities relative to height and length of

Card 2/3

Viscous-plastic flow... S/124/62/000/001/043/046
D237/D304

the cover, and under the influence of the temperature. Processing observations in East Antarctic had shown that the profile of the glacier represents a correct semi-ellipse and that calculated velocities of motion satisfactorily agree with observation. /Abstracter's note: Complete translation./

Card 3/3

KARTASHOV, Sergey Nikolayevich; VYALOV, S.S., doktor tekhn. nauk, prof., otv. red.; ZOLOTOV, P.F., red. izd-va; GOLUB', S.P., tekhn. red.

[Physicomechanical properties and processes of the formation of the snow-firn cover in eastern Antarctica] Fiziko-mekhanicheskie svoistva i protsessy formirovaniia snezhno-firnovogo pokrova Vostochnoi Antarktidy. Moskva, Izd-vo Akad. nauk SSSR, 1962. 105 p. (MIRA 15:5)

(Antarctic regions--Snow)

VYALOV, Sergey Stepanovich, prof., doktor tekhn. nauk; GMOSHINSKIY, Vsevolod Georgiyevich; GORODETSKIY, Stanislav Eduardovich; GRIGOR'YEVA, Vera Grigor'yevna; ZARETSKIY, Yuriy Konstantinovich; PEKARSKAYA, Nina Kazimirovna; SHUSHERINA, Yelizaveta Petrovna; SANOVICH-OSIPOV, P.O., red.; DOROKHINA, I.N., tekhn. red.

[Stability and creep of frozen ground and calculations of ice walls]Prochnost' i polzuchest' merzlykh gruntov i raschety ledogruntovykh ograzhdenii. Moskva, Izd-vo Akad. nauk SSSR, 1962. (MIRA 15:9)

(Frozen ground)

PEKARSKAYA, Nina Kazimirovna; VYALOV, S.S., prof., doktor tekhn. nauk, otv. red.; BRODSKAYA, A.G., red. izd-va; ZUDINA, V.I., tekhn. red.

[Resistance of frozen ground to shifting and its dependence on texture] Prochnost' merzlykh gruntov pri sdvige i ee zavisimost' ot tekstury. Moskva, Izd-vo Akad. nauk SSSR, 1963. 106 p. (MIRA 16:7)

(Frozen ground)

VYALOV, S. S., Mel'NIKOV, Pavel Ivanovich, SNEZHKO, O. V.,

"Pile foundations"

report to be submitted for the Intl. Conference on Permafrost, Purdue Univ., Lafayette, Indiana, 11-15 Nov 63

VYALOV, S. S.,

"Rheology of frozen soils"

report to be submitted for the Intl. Conference on Permafrost, Purdue Univ., Lafayette, Indiana, 11-15 Nov 63

SHUSHERINA, Ye.P.; VYALOV, S.S.

Studying the lasting bearing power of frozen soils under uniaxial compression. Merzl. issl. no.3:314-347 '63.
(MIRA 17:6)

VYALOV, S.S.

Reviews and bibliography. Osn. fund. i mekh. grun. 5 no.3: 29-31 '63. (MIRA 17:1)

VYALOV, S.S.

Concerning the forthcoming revision of "Technical specifications for designing footings and foundations on permafrost soils." Osn., fund. i mekh. grun. 5 no.4:21-22 '63.
(MIRA 16:11)

VYALOV, S.S., doktor tekhn. nauk

Calculating stability and creep of frozen ground barriers.
Shakht. stroi. 7 no.12:6-9 D'63. (MIRA 17:5)

1. Institut merzlotovedeniya imeni V.A. Obrucheva.

VYALOV, S. S.

"Plasticity and creep of cohesive medium."

report submitted for Intl Symp on Rheology & Soil Mechanics, Grenoble, France, 1-8 Apr 64.

VYALOV, S. S. (Moscow)

"Problems of the plasticity and creep theory of cohesive media"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 1964.

ABELEV, Yu.M., doktor tekhn. nauk, prof.; ABELEV, M.Yu., inzh.; BAKHOLDIN, B.V., kand. tekhn. nauk; BEREZANTSEV, V.G., doktor tekhn. nauk, prof.; VYALOV, S.S., doktor tekhn. nauk; GODES, E.G., inzh.; GORBUNOV-POSADOV, M.I., doktor tekhn. nauk, prof.; DALMATOV, B.I., doktor tekhn. nauk, prof.; DOKUCHAYEV, V.V., kand. tekhn. nauk; KRUTOV, V.I., kand. tekhn. nauk; KSENOFONTOV, A.I., kand. tekhn. nauk; MARIUPOL'SKIY, G.M., kand. tekhn. nauk; MORARESKUL, N.N., inzh.; PERLEY, Ye.M., inzh.; SAVINOV, O.A., doktor tekhn. nauk; SIDOROV, N.N., kand. tekhn. nauk; SMORODINSKIY, N.A., kand. tekhn. nauk; SOKOLOV, N.M., doktor tekhn.nauk; FRIDKIN, A.Ya., inzh.; SHASHKOV, S.A., kand. tekhn.nauk; SHEYKOV, M.L., inzh.; YAROSHENKO, V.A., kand.tekhn.nauk, [deceased]; KHALIZEV, Ye.P., kand. tekhn. nauk, nauchn.red.

[Manual for the designing of industrial plants, apartment houses, and public buildings and structures; foundations] Spravochnik proektirovshchika promyshlennykh, zhilykh i obshchestvennykh zdanii i sooruzhenii; osnovaniia i fundamenty. Leningrad, Stroiizdat, 1964. 268 p.

(MIRA 18:1)

L 55054-65 EWT(1) GW

ACCESSION NR AT5009633 UR/3146/64/000/004/0340/0375

[illegible]

ACCESSION NR: A[illegible]

[illegible] at the Institut mekhaniki AN SSSR (Institute of Mechanics, AN SSSR)

NO REF SOV: 010 OTHER: 000

VYALOV, S.S.

Foundation construction in permafrost in the U.S.A. and Canada.
Osn., fund. i mekh. grun. 7 no.3:28-30 '65.
(MIRA 18:6)

ACC NR: AR7004111 (AN) SOURCE CODE: UR/0169/66/000/012/V050/V050

AUTHOR: Vyalov, S. S.; Yermakov, V. F.

TITLE: Decrease in the strength of ice with time

SOURCE: Ref. zh. Geofizika, Abs. 12V328

REF SOURCE: Tr. koordinats. soveshchaniy po gidrotekhn., vyp. 23, 1965, 89-99

TOPIC TAGS: glaciology, ice strength, dynamometer, ice rheology, elasticity, rheologic property, ice, plastic deformation, plastic strength

ABSTRACT: A new method of determining the rheological properties of ice using a dynamometric device is examined. The purpose of the method is to accelerate and simplify testing procedures. The test is conducted by measuring the initial load applied to the specimen from the tension on an elastic dynamometer. The stress transmitted to the sample through the dynamometer, produces in the sample creep deformation which, in turn, causes the dynamometer to relax and reduce the stress. The reduction of stress will continue, under any given stress, until the sample's deformation achieves stabilization, i. e., until a state of equilibrium is attained between the load applied to the sample through the dynamometer and the

Card 1/2 UDC: 551.32:53

ACC NR: AR7004111

internal resistance of the ice. If the initial strain applied to the sample is approximately equal to the assumed-instantaneous strength, then the stabilization of deformation will correspond to the limiting equilibrium. Since ice does not have stress-rupture strength, a nominative value of relative deformation for a specific length of time may be regarded as the deformation stabilization. Dynamometer testing may be regarded as creep tests with stress varying with time; changes in stress and deformation are interdependent. The proposed method is recommended for conducting tests under different loads (compression, rupture, shear). In conclusion, data obtained in testing samples of polycrystalline glacier and lacustrine ice (Mirnyy, Antarctica), using the dynamometer, are presented. A bibliography of 5 titles is included. G. Deyev. [Translation of abstract]

[SP]

SUB CODE: 08/

Card 2/2

CHUKSIN, Yuriy Vladimirovich, inzh.; VYALOV, Yuriy Aleksandrovich, inzh.; KUDKINA, Ye., red.; NIKITINA, V., tekhn. red.

[Herring of the Northwestern Atlantic and fisheries for them] Sel'di Severo-Zapadnoi Atlantiki i ikh promysel. Kaliningrad, Kaliningradskoe knizhnoe izd-vo, 1963. 122 p. (MIRA 17:3)

1. Atlanticheskaya nauchno-promyslovaya perspektivnaya razvedka Nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii (for Chuksin, Vyalov).

SOV/124-57-3-2893

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 38 (USSR)

AUTHOR: Vyalova, A. I.

TITLE: Application of Non-ducted Air Delivery at Textile Factories (Primeneniye beskanal'noy podachi vozdukha na tekstil'nykh fabrikakh)

PERIODICAL: Tr. nauch. sessii Vses. n.-i. in-ta okhrany truda, 1955, Nr 4, pp 107-134

ABSTRACT: Bibliographic entry

Card 1/1

VYALOVA, A.I.

Studying the various ventilation systems in rooms without natural light. Izv.vys.ucheb.zav.; tekh.tekst.prom. no.1:123-132 '63.
(MIRA 16:4)

1. Ivanovskiy nauchno-issledovatel'skiy institut okhrany truda.
(Textile factories--Heating and ventilation)

VYALOVA, A. I. Cand Tech Sci -- (diss) "Study of the air currents in weaving and spinning rooms as applicable to ~~the~~ new ~~buildings~~ construction projects of the textile industry." Len, 1959. 15 pp (Min of Higher Education USSR. Len Order of Labor Red Banner Construction Engineering Inst. Chair of Heat and Gas Supply and Ventilation), 150 copies (KL, 48-59, 114)

VYALOVA, A. I.

Concentrated supply of air in textile factories. Izv. vys.ucheb. zav.; tekh.tekst.prom. no.2:156-167 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Textile factories--Heating and ventilation)

VYALOVA, A.I.

Effect of various methods of used air removal on the efficiency of air exchange created in the room. Izv.vys.ucheb.zav.; tekh.tekst.prom. no.5:117-123 '61. (MIRA 14:11)

1. Ivanovskiy nauchno-issledovatel'skiy institut okhrany truda.

(Textile factories--Heating and ventilation)

VYALOVA, M.T.

Role of cytological analysis in certain otolaryngological diseases; clinical studies. Vest. otorinolar., Moskva 15 no.2:32-36 Mar-Apr 1953.
(CLML 24:3)

1. Of the Clinic for Diseases of the Ear, Throat, and Nose (Director -- Prof. A. G. Likhachev), First Moscow Order of Lenin Medical Institute.

BABAYANTS, R.S.; BLAGOVESHCHENSKAYA, V.V.; VERGILESOVA, O.S.; VISSONOV, Yu.V.;
VYALOVA, N.A.; GLAZUNOV, I.S.; DRUTMAN, R.D.: KLEMPARSKAYA, N.N.;
KOTOVA, E.S.; KURSHAKOV, N.A., prof.; LARICHEVA, L.P.; LYSKOVA, M.N.;
MALYSHEVA, M.S.; PETUSHKOV, V.N.; RYNKOVA, N.N.; SOKOLOVA, I.I.;
STUDENIKINA, L.A.; CHUSOVA, V.N.; SHESTIKHINA, O.N.; SHULYATIKOVA,
A.Ya.; SHTUKKENBERG, Yu.M.; BARANOVA, Ye.F., red.

[Acute radiation lesion in man] Ostraia radiatsionnaia travma u cheloveka. Moskva, Meditsina, 1965. 313 p.

(MIRA 18:9)

1. Chlen-korrespondent AMN SSSR (for Kurshakov).

Vyalova, N.A.

PHASE I BOOK EXPLOITATION SOV/6344

Alekseyeva, O. G., A. F. Bibikova, N. A. Vyalova, A. Ye. Ivanov, N. A. Krayevskiy, N. A. Kurshakov, N. V. Paramonova, V. N. Petushkov, V. V. Snegireva, L. A. Studenikina, Yu. M. Shtukkenberg, and A. Ya. Shulyatikova

Sluchay ostroy luchevoy bolezni u cheloveka (A Case of Acute Radiation Sickness in Man). Moscow, Medgiz, 1962. 149 p. 10,000 copies printed.

Ed. (Title page): N. A. Kurshakov, Corresponding Member Academy of Medical Sciences SSSR, Professor; Ed.: S. P. Landau-Tylkina; Tech. Ed.: N. A. Yakovleva.

PURPOSE: This monograph is intended for physicians and biologists.

COVERAGE: This book describes an actual case of acute radiation sickness in its severe form. It describes in detail clinical symptoms, changes in biochemical indexes, morphological changes in the nervous system, and the distribution of depth doses and energy absorption.

Card 1/4

VYALOVA, N. A.

PHASE I BOOK EXPLOITATION SOV/6344

Alekseyeva, O. G., A. F. Bibikova, N. A. Vyalova, A. Ye. Ivanov, N. A. Krayevskiy, N. A. Kurshakov, N. V. Paramonova, V. N. Petushkov, V. V. Snegireva, L. A. Studenikina, Yu. M. Shtukkenberg, and A. Ya. Shulyatikova

Sluchay ostroy luchevoy bolezni u cheloveka (A Case of Acute Radiation Sickness in Man). Moscow, Medgiz, 1962. 149 p. 10,000 copies printed.

Ed. (Title page): N. A. Kurshakov, Corresponding Member Academy of Medical Sciences SSSR, Professor; Ed.: S. P. Landau-Tylkina; Tech. Ed.: N. A. Yakovleva.

PURPOSE: This monograph is intended for physicians and biologists.

COVERAGE: This book describes an actual case of acute radiation sickness in its severe form. It describes in detail clinical symptoms, changes in biochemical indexes, morphological changes in the nervous system, and the distribution of depth doses and energy absorption.

Card 1/3

D'YAKOV, B.F.; IMASHEV, N.U.; KRUCHININ, K.V.; KOGAN, A.B.:
KOZMODEM'YANSKIY, V.V.; TOKAREV, V.P.; TRIFONOV, N.K.
CHEREPANOV, V.N.; VYALOVA, R.I.

Southern Mangyshlak is a large new oil-bearing region. Geol. nefti i gaza 5 no.12:4-11 D '61. (MIRA 14:11)

1. Vsesoyuznyy nefteyanoy nauchno-issledovatel'skiy geologorazvedocheskoye upravleniye i trest Mangyshlakneftegazrazvedka.
(Mangyshlak Peninsula—Oil fields)

VYALOVA, R.I.; D'YAKOV, B.F.; IMASHEV, N.U.; KOZ'MODEM'YANSKIY, V.V.;
KRAYEV, P.I.; KRUCHININ, K.V.; TOKAREV, V.P.; TRIFONOV, N.K.;
CHEREPANOV, N.N.

Southern-Mangyshlak oil- and gas-bearing region. Trudy VNIGRI
no.218:7-50 '63. (MIRA 17:3)

VYALOVA, R.I., redaktor; DROBYSHEV, D.V., redaktor; KOLTYPIN, S.N., redaktor; MOISEYENKO, V.S., redaktor; SAZONOV, N.T., redaktor; SOKOLOVA, Ye.I., redaktor; YASHCHURZHINSKAYA, A.B., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor

[Proceedings of the All-Union Conference on the Development of a Uniform System of Stratigraphy of Mesozoic Deposits of the Russian Platform] Trudy Vsesoiuznogo soveshchaniia po razrabotke unifitsirovannoy skhemy stratigrafii mezozoyskikhotlozheniy Russkoy platformy. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, Leningradskoe otd-nie, 1956. 383 p. (MLRA 9:12)

1. Vsesoyuznoye soveshchaniye po razrabotke unifitsirovannoy schemy stratigrafii mezozoiskikh otlozhenii Russkoy platformy, 1954. (Russian Platform--Geology, Stratigraphic)

VYALOVA, R.I.; KIRICHKOVA, A.I.

Jurassic sediments in the Mangyshlak Peninsula. Trudy VNIGRI no.218:236-247 '63. (MIRA 17:3)

VYALOVA, R.I.; DOROGOKUPETS, A.V.

Correlation between the cross sections of Jurassic producing formations in the Zhetybay and Uzen' deposits. Trudy VNIGRI no.218:51-53 '63. (MIRA 17:3)

KRASNOV, M.L., prof.; SIVOSHINSKIY, D.S., dotsent; ZIANGIROVA, G.G.;
VYALOVA, Ye.V.; STEN'KO, Z.L.

Results of three year's use of radioactive isotopes in the diagnosis of intraocular tumors. Trudy TSIU 71:107-112 '64.
(MIRA 18:6)

1. Kafedra glaznykh bolezney (zav. prof. M.L. Krasnov), kafedra meditsinskoy radiologii (zav. prof. V.K. Modestov) TSentral'nogo instituta usovershenstvovaniya vrachey i Moskovskaya glaznaya klinicheskaya bol'nitsa.

EXCERPTA MEDICA Sec 5 Vol.11/7 Pathology July 58

VYALOVSKAYA, R.D.

1801. HISTOCHEMICAL METHOD OF CHOLINESTERASE DETERMINATION (Russian text) - Vyalovskaya R. D., Mastbaum J. S. and Simon J. B. - ARKH. PATOL. 1956, 18/3 (114-116) Illus. 1

The reagents necessary for the reaction are: (1) β-naphthyl acetate (I), obtained by action of chloracetyl on naphthol in an indifferent solvent. Twofold recrystallization from acetone. M.p. 68°. (2) Tetrazonium (II) is prepared by diazotization of di-*ortho*-anisidine. This diazo compound is stabilized with zinc chloride and stored in the dark. (3) Medinal buffer (0.1 M, pH = 7.8) is prepared ex tempore from a mixture of a 61.5 0.1 M medinal solution and a 38.5 0.1 M HCl solution at pH 7.5-8.0. (4) $CaCl_2$. (5) 2 N-NaCl. The solution necessary for the reaction is prepared as follows: 12.5 ml. of the solution of NaCl is mixed with 1.25 ml. of the 3% $CaCl_2$ solution adding 12.5 ml. of the medinal buffer. 4 mg. *p*-naphthylacetate, dissolved in 0.25 acetone and 12 mg. tetrazonium are added. Shake thoroughly, filter and use immediately for the determination of the cholinesterase (non-storable). The determination is carried out in fresh, non-fixed frozen sections 15-25 μ. thick, mounted on object slides and dried in the thermostat. The object slides are then kept in the freshly prepared mixture in the thermostat at 37° for 10-20 min., washed in distilled water for 5 to 15 min. and embedded in glycerine. The enzyme appears in the form of punctate violet drops, whose staining intensity varies according to the functional condition of the object examined. The reaction scheme is given. (I, 5)

EXCERPTA MEDICA Sec.5 Vol.11/3 Gen.Pathology,etc.Mar58

VYALOVSKAYA, R.D.

871. HISTOCHEMICAL METHOD OF CHOLINESTERASE DETERMINATION

(Russian text) - Vyalovskaya R.D., Mastbaum J.S. and Simon J.B. - ARKH. PATOL. 1956, 18/3 (114-116) Illus. 1

The reagents necessary for the reaction are: (1) β-Naphthylacetate (I) obtained by action of chloracetyl on naphthol in an indifferent solvent. Twofold recrystallization from acetone. M.p. 68°. (2) Tetrazonium (II) is prepared by diazotization of di-*ortho*-anisidine. This diazo compound is stabilized with zinc chloride and stored in the dark. (3) Medinal buffer (0.1 M, pH = 7.8) is prepared extempore from a mixture of a 61.5 ml. 0.1 M medinal solution and a 38.5 ml. 0.1 HCl at pH 7.5-8.0. (4) 3% $CaCl_2$. (5) 2-N sodium chloride solution. The solution necessary for the reaction is prepared as follows: 12.5 ml. of the solution of NaCl is mixed with 1.25 ml. of the 3% $CaCl_2$-solution adding 12.5 ml. of the medinal buffer. 4 mg. *p*-naphthylacetate, dissolved in 0.25 acetone and 12 mg. tetrazonium are added. Shake thoroughly, filter and use immediately for the determination of the cholinesterace (non-storable). The determination is carried out in fresh, non-fixed frozen sections 15 to 25 μ. thick, mounted on object slides and dried in the thermostat. The object slides are then kept in the freshly prepared mixture in the thermostat at 37° for 10-20 min., washed in distilled water for 5 to 15 min. and embedded in glycerin. The enzyme appears in the form of punctate violet drops, whose staining intensity varies according to the functional condition of the object examined. The reaction scheme is given.

(I, 5)

VYALOVSKIY, A.

The sale of equipment has begun. Fin. SSSR 19 no.4:43-44 Ap '58.
(MIRA 11:4)

1.Direktor mashinno-traktornoy stantsii b.Krasnogorskoy zony Moskovskoy oblasti.
(Collective farms)
(Machine-tractor stations)

VYAL'SHIN, A.N.

PHASE I BOOK EXPLOITATION SOV/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniy v narodnom khozyaystve i nauke, Moscow, 1957

Polucheniye izotopov. Moshchnyye gamma-ustanovki. Radiometriya i dozimetriya; trudy konferentsii... (Isotope Production. High-energy Gamma-Radiation Facilities. Radiometry and Dosimetry; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR; Glavnoye upravleniye po ispol'zovaniyu atomnoy energii SSSR.

Editorial Board: Frolov, Yu.S. (Resp. Ed.), Zhavoronkov, N.M. (Deputy Resp. Ed.), Aglintsev, K.K., Alekseyev, B.A., Bochkarev, V.V., Leshchinskiy, N.I., Malkov, T.P., Sinitsyn, V.I., and Popova, G.L. (Secretary); Tech. Ed.: Novichkov, N.D.

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

Frolov, Yu.S., V.V. Bochkarev, and Ye.Ye. Kulish. Development of Isotope Production in the Soviet Union 5

This report is a general survey of production methods, apparatus, raw materials, applications, investigations and future prospects for radio isotopes in the Soviet Union.

Card 2/12

Gol'bek, G.R., and A.N. Vyal'shin. Using Soviet Germanium Transistors in Building Radiometric Equipment 220

Card 9/12

Vorobyeva, L.V., K.S. Kalugin, and Yu.N. Shtukkenberg. Set-up for Measuring Individual Doses of Gamma-rays Within a Wide Range 228

Lyapidevskiy, V.K. The Use of a Diffusion Chamber for Measuring Low Activity 235

Gol'bek, G.R., and A.N. Vyal'shin. Pocket Radiometers and Dosimeters 238

General description and electric circuit diagrams are given for a pocket-sized radiometer intended for approximate determination of gamma- and hard beta-ray intensities above 1 Mev. Time lapse after onset of radiation registration serves as a parameter for the determination of intensity up to 1000 μr/hr with an accuracy of ± 20 percent. Working principle, components and electric circuit diagram are given for a pocket-size dosimeter capable of detecting approximate intensities of gamma- and beta-radiation from 0.1 to 5000 μr/sec and

Card 10/12

SOV/1297

and above 0.2 Mev, respectively.

VYAL'TSEV, Anatoliy Nikolayevich; KOL'MAN, E., otv. red.

[The discrete space-time] Diskretnoe prostranstvo-vremia.
Moskva, Nauka, 1965. 397 p. (MIRA 18:6)

VYAL'TSEV, A.N.; KEDROV, B.M.; KONDRAT'YEVA, N.A., aspirant;
RODNYY, N.I.; SMIRNOV, P.V., aspirant; CHERNAVSKIY,
S.Ya., aspirant; TENIKOV, A.G., red.

[Contradictions in the development of natural science]
Protivorechiia v razvitii estestvoznaniia. Moskva, Nauka,
1965. 351 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki. 2. Chlen-korrespondent AN SSSR (for Kedrov).

S/214/62/000/002/002/002
I046/I246

AUTHOR: Vasil'yeva, G. Ya. and Vyal'shin, G. F.

TITLE: On the dependence of time variations of magnetic fields and radial velocities on the stability of active regions in the photosphere

PERIODICAL: Solnechnyye dannyye, no. 2, 1962, 58-66

TEXT: The longitudinal component of magnetic fields and radial velocities were determined for two groups of sun spots: July 15, 1961 $\varphi = -8°$, $l = +18°$ (No. 198 in "Solnechnyye dannyye"), and August 27, 1961 $\varphi = +15°$, $l = +20°$ (No. 243). Comparison of the magnetic-field maps with radial velocity distributions (scanned on four different occasions on July 15, and on two different occasions on August 27) shows that the magnetic field is not frozen into the gas at the photospheric level (compare S. Meyr, C. R., 251, No. 14, 1960; V. E. Stepanov, Izv. KrAO, XXV, 154, 1961). The authors show that the radial velocities in the photosphere are a more sensitive criterion than magnetic fields for the activity of spot groups, whereas the magnetic-field maps show no definite correlation in changes registered thereon. The accelerations in active regions (July 15) cluster around 0.04 m/sec^2 and in calm groups of spots (August 27) around 0.01 m/sec^2. There are 2 figures and 2 tables.

Card 1/1

24369

S/035/61/000/007/020/021
A001/A101

3,1540

AUTHOR: Vyal'shin, G.F.

TITLE: On rapid changes in magnetic fields of sunspots

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 7, 1961, 46, abstract 7A351 ("Solnechnyye dannyye", 1960 (1961), no. 10, 79-83)

TEXT: The results of investigating changes in magnetic fields of sunspots during 24 hours are reported. Observations were conducted by means of the great solar telescope of the Main Astronomical Observatory, AS USSR. Several series, 8,210 observations in each, were made. The results from two days of observations did not reveal any noticeable variations in the strength of the magnetic field. However, on July 10, 1960, a great change in the sunspot magnetic field was recorded. Within 4.5 hours of observations, the field strength decreased from 2,900 to 2,100 gs, and then increased again up to some mean value of 2,500 gs. Simultaneous photographs showed changes in dimensions and shape of the nucleus. The author is of the opinion that rapid considerable field variations apparently exist which are associated with changes in the structure of the sunspots.
[Abstracter's note: Complete translation] Ye. Yesipov

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Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 4, p. 42, # 3165

AUTHOR: Vyal'shin, G. F."

TITLE: Comparison of Two Methods of Measuring Magnetic Fields of Sunspots

PERIODICAL: Solnechnyye dannyye, 1959, No. 1, pp. 81-83

TEXT: Two methods of measuring magnetic fields of sunspots are compared. Using the first method, the iron line λ 6302.508 in the spot spectrum is photographed in the spectrograph's 4th order (dispersion 0.36 A/mm). The application of a λ/4 plate in front of the slit and a Wollaston prism in the spectrum plane makes it possible to observe the Zeeman splitting of the line. Using the second method, the sunspot is photographed by means of an interference device described earlier by the author (RZhAstr, 1958, No. 6, # 3792). Conditions of exposure and development of the film in both of the methods were the same. The comparison of the results shows that in 34 cases of 50, the intensity of a magnetic field measured by the interference method is less than the intensity measured by the

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Comparison of Two Methods of Measuring Magnetic Fields of Sunspots

direct photographing of Zeeman splitting. This systematic difference is explained by the inaccuracy in superposition of the spot central part with the interference ring. In case of the absence of high resolution power spectrographs, the interference method can be used, if the accuracy of aiming is improved.

R. B. Teplitskaya

Card 2/2

L 08655-67 EWT(1) GW

ACC NR: AR6019477 SOURCE CODE: UR/0269/66/000/002/0053/0054

AUTHOR: Vyal'shin, G. F.; Krat, V. A.

56

ORG: none

TITLE: Magnetic fields in the solar chromosphere

SOURCE: Ref. zh. Astronomiya, Abs. 2.51.429

REF SOURCE: Izv. Gl. astron. observ. v Pulkove, v. 24, no. 2, 1965, 26-34

TOPIC TAGS: solar chromosphere, magnetic field, photosphere, telescope, hydrogen, helium, electron temperature

ABSTRACT: The longitudinal intensity components of magnetic fields (H) and the radial velocities (v) were determined at Pulkovo Observatory from the Hβ line with the aid of the Pulkovo solar magnetograph in a horizontally mounted solar telescope during July-September 1963. Observations were conducted using the incoming slit measuring 1".2 x 5".9 on the solar disk. Fluctuations of about 30", characteristic both for the photosphere and the chromosphere, were investigated. The fluctuation range of H for the chromosphere was approximately 5 times as great as that for the photosphere. Thus, H for the chromospheric "hydrogen" elements was appreciably greater than for the nonperturbed atmosphere. This, however, did not necessarily mean that H in the chromosphere was always greater than in the photosphere. V. Ye. Stepanov's observations lend evidence that for the coldest, "metallic" chromospheric elements, with the electron temperature of $T_e < 7500$C, H decreased, as the distance h above the level of the photosphere increased. For "helium" elements ($T_e \geqslant 20{,}000$C) H could not be determined at present. Traces of H and v quite frequently exhibited a parallel or antiparallel rela-

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tionship, giving additional evidence of the magnetic field being "frozen in" in the gas in case of characteristic dimensions of about 30" on the disk and of large-scale wave processes in the photosphere. The gradient of the magnetic field of spots in the lower chromosphere (up to h ≈ 1000 km) was 1.2 e/km.

SUB CODE: 03/ SUBM DATE: none

Card 2/2

VYAL'TSEV, Anatoliy Nikolayevich; KEDROV, B.M., otv. red.;
YELSHIN, Ye.Ye., red.izd-va; KHRUSTALEV, A.V., red.
izd-va; ZUDINA, V.I., tekhn. red.

[Lightest atomic nuclei] Legchaishie atomnye iadra.
Moskva, Izd-vo AN SSSR, 1963. 333 p. (MIRA 17:2)

VYAL'TSEV, A. N.

"History of the Problems of Nuclear Forces." Cand Phys-Math Sci, Physics Faculty, Moscow State U, Moscow, 1954. (KL, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

VYAL'TSEV, A.O.; IVANOV, I.V.; KARASEV, M.D.; POTEMKIN, V.V.

Measurement of the noise of frequency multipliers using a transistor diode. Radiotekh.i elektron. 8 no.2:349-351 F '63.
(MIRA 16:2)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta, kafedra teorii kolebaniy.
(Frequency multipliers—Noise)
(Radio measurements)

SNEGIREV, Yu.D., kand. tekhn. nauk; LUNOV, E.P., kand. tekhn. nauk; VYAL'TSEV, M.M., inzh.

Investigating conditions of shaft lining with reinforced-concrete tubing in coal mines of the Rostovugol' Combine. Shakht. stroi. 9 no.10:12-15 O '65. (MIRA 18:9)

1. Shakhtinskiy filial Novocherkasskogo politekhnicheskogo instituta.

VYAL'TSEV, M.M.

Determining the actual strength of concrete in mine shaft lining using a ball-type hammer. Trudy NPI 140:45-52 '63.
(MIRA 17:9)

SNEGIREV, Yu.D.; VYAL'TSEV, M.M.; LUNOV, E.P.

Investigating the durability of monolithic concrete shaft
lining in mines of the Rostovugol' Combine. Trudy NPI
140:29-43 '63. (MIRA 17:9)

LUNOV, E.P., kand.tekhn.nauk; SNEGIREV, Yu.D., gornyy inzh.; VYAL'TSEV, M.M., gornyy inzh.

Rock pressure manifestations during the mining of areas overlying stoped workings. Ugol' 36 no.5:20-23 My '61. (MIRA 14:5)

1. Novocherkasskiy politekhnicheskiy institut.
(Rock pressure) (Coal mines and mining)

SNEGIREV, Yu.D.; VYAL'TSEV, M.M.; LUNOV, E.P.; SHAFRANCV, N.K.

Testing concretes for water permeability. Trudy NPI 113:47-60 '61. (MIRA 15:2)

(Concrete--Testing)

VYAL'TSEV, M.M.

Pressure determination based on the deformation of supports. Trudy NPI 113:29-38 '61. (MIRA 15:2)
(Rock pressure) (Mine timbering)

LUNOV, E.P.; SNEGIREV, Yu.D.; VYAL'TSEV, M.M.

Results of observations on rock movements in the Artem No. 2
"Glubokaya" Mine. Trudy NPI 103:77-95 '59. (MIRA 13:9)
(Donets Basin--Subsidences (Earth movements))

VYAL'TSEV, V.V.; KHORGUANI, V.G.

High-power low-frequency acoustical siren. Akust.zhur. 7 no.3: 377-378 '61. (MIRA 14:9)

1. Kabardino-Balkarskoye otdeleniye Instituta prikladnoy geofiziki AN SSSR, g. Nal'chik.

(Sound—Apparatus)

28737
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D038/D113

3.5910

AUTHOR: Vyal'tsev, V.V.

TITLE: Artificial cloud dispersal

PERIODICAL: Priroda, no.11, 1961, 79-83

TEXT: The article deals with a cloud dispersal carried out above Dzhankoy and the Krymskaya astrofizicheskaya observatoriya (Crimean Astrophysical Observatory) on February 15, 1961 - a day of total solar eclipse. As there are very few clear days in February in the Crimea, the Astronomicheskiy sovet AN SSSR (Astronomical Council of the AS USSR) requested the Institut prikladnoy geofiziki AN SSSR (Institute of Applied Geophysics of the AS USSR) to carry out seeding operations. Carbon dioxide known as dry ice was used by two aircraft. At 0830 hrs, the first aircraft flying at 1200 m started seeding 20x20 km strips spaced 3 km apart over an area 70 km north-east of the observatory which was covered in a thick fog; a 6-8 m/sec north easterly wind, and a temperature of -3°C were prevalent; 3 kg/min of carbon dioxide was used. On completion of the first "window", a second one was seeded behind it. At 1100 hrs the wind backed from north-east to north, with a re-

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Artificial cloud dispersal

sulting narrowing of the window, and the aircraft seeded the observatory from the north. Seeding operations were carried out till 1300 hrs. The second aircraft (a/c no. 1802) seeded the area above Dzhankoy which was covered with one cloud layer with a 600 m upper boundary. Whilst the first layer was being seeded, a second cloud layer with a 1100 m upper boundary had formed 300 m above the first one. It is stated that thanks to the crew's past experience in cloud dispersal the layer was quickly disposed of. Seeding operations were conducted against the wind, i.e. 40 km north-east of Dzhankoy. Here, too, it was necessary to correct the seeded zone from the north as the wind backed north shortly before the eclipse. Ground visibility during the eclipse was sufficient to allow 70-75% of the observational material to be collected. The author concludes that the method of artificially dispersing clouds could be extensively used in many other scientific fields. Chief installation operator Ya.N. Podkhalyuzin assisted by senior laboratory workers N.F. Kazadayev and M.I. Alekhin operated from the first aircraft piloted by P.V. Volovikov. Candidate of Chemical Sciences V.N. Balabanova, assisted by Ye.F. Mamina, V.M. Ryabov and E.I. Rumberg operated from the second aircraft. There are 2 figures.

ASSOCIATION: Institut prikladnoy geofiziki AN SSSR (Institute of Applied Geophysics of the AS USSR). Moskva (Moscow).

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VYAL'TSEV, V.V.

Artificial dissipation of clouds. Priroda 50 no.11:79-83 N '61.
(MIRA 14:10)

1. Institut prikladnoy geofiziki AN SSSR (Moskva).
(Crimea—Weather control)

L 40280-66 EWT(1)/FCC IJP(c) GW/WW

ACC NR: AR6014564 SOURCE CODE: UR/0169/65/000/011/B039/B039

47

AUTHORS: Vyal'tsev, V. V.; Makharashvili, A. Z.; Khorguani, V. G.

TITLE: The effect of a powerful acoustic field on the microstructure of natural fogs

SOURCE: Ref. zh. Geofizika, Abs. 11B280

REF SOURCE: Tr. In-t prikladn. geofiz., vyp. 1, 1965, 47-50

TOPIC TAGS: atmospheric visibility, acoustic field, fog, atmospheric water

ABSTRACT: Experiments in the influence of a powerful sound field on natural fogs were made with a siren with a sound power of up to 20 kw in the range of 100--300 hz for a sound-ray width of $\sim 30^\circ$. The microstructure of the fog and the visibility transverse to the sound ray were determined before, during, and after irradiation at distances of 25 and 75 m from the siren. A change in the microstructure of the fog--an increase in the average drop size--was observed in 12 cases out of 21 at distances to 30--40 m. The effect was observed in fogs with a high concentration of drops ($n > 200\text{-}250\ cm^{-3}$) and water content ($q > 15\ g \cdot m^{-3}$) with gentle breezes ($v < 1\ m \cdot sec^{-1}$). V. B. [Translation of abstract]

SUB CODE: 04

Card 1/1 UDC: 551.596